



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,085	10/22/2003	MinGeun Cho	60073 (72027)	8298

21874 7590 04/22/2005

EDWARDS & ANGELL, LLP
P.O. BOX 55874
BOSTON, MA 02205

EXAMINER

AVERY, BRIDGET D

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,085

Applicant(s)

CHO ET AL.

Examiner

Bridget Avery

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Information Disclosure Statement filed by applicant on April 23, 2004 is acknowledged and has been considered.

Claim Objections

2. Claim 1 is objected to because of the following informalities: on lines 6 and 8, "they" should be changed to --the pair of wheels--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the slot" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3618

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrosino (US Patent 5,887,898).

Petrosino teaches a wheel assembly for a shoe (106) including a housing (102) defining a channel (122) and a contact surface (118) attached to a heel portion of the shoe (106) and defined with an opening (148); a wheel section mounted to the housing where a pair of wheels (128) of the wheel section can be moved between an operating position, as shown in Figure 3, where the pair of wheels (128) are received in the opening (148) of the housing (102) and are partially exposed out of a lower surface of the housing (102) and a non-operating position where the pair of wheels (128) are taken out of the opening (148) of the housing (102) to be seated on a rear end portion of the shoe (106), as shown in Figure 5. The wheel section includes the pair of wheels (128), a shaft, as defined by the axle and bearings (126) for supporting the pair of wheels (128), and a support bracket (142) having one end connected to the shaft and the other end connected to the shoe by a pin (136). The rear end portion of the shoe (106) is formed with an engaging projection defined by bracket (146); the engaging projection (146) can be close fitted in the slot defined in the support bracket (142) to hold the wheel section to the non-operating position, as clearly shown in Figure 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3618

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrosino ('898).

Petrosino teaches the features described above but lacks the exact teaching of using a "hinge" pin to connect the support bracket to the shoe. Petrosino further teaches hinge pins (144).

Based on the teachings of Petrosino, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the pin (132) to be a hinge pin to increase the number of universal/interchangeable parts to reduce manufacturing cost and to reduce the assembly time associated with sorting parts.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrosino ('898) in view of Zhang (US Patent 5,649,716).

Petrosino teaches the features described above but lacks the teaching of wheels structured to emit lights.

Zhang teaches wheels structured to emit lights wheel while rotating.

Based on the teachings of Zhang, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the wheels of Petrosino to emit light while rotating to provide an attractive, decorative light display.

Art Unit: 3618

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrosino ('898) in view of Chung (US Patent 5,976,530).

Petrosino teaches the features described above but lacks the teaching of a shaft threaded at both ends, a pair of cap elements locked to the external threads and a pair of flange portions integrally formed on a circumferential outer surface of the shaft at pre-selected locations.

Chung teaches a shaft (40) having external threads (42) at both ends, a cap defined by a nut (80) locked to the external threads (42) and a pair of flange portions, as clearly shown in Figure 1 indicated by the number 40 and described in the disclosure as the shaft, positioned on a circumferential outer surface of the shaft (40) at pre-selected locations.

Based on the teachings of Chung, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the shaft of Petrosino to include external threads at both ends, a cap locked to the external threads and a pair of flange portions to doubly fix the rolling wheel tightly in abutment against the wheel shaft, as taught by Chung in column 2, lines 43-46. With respect to claim 6 and integrally formed flange portions, it would have been obvious to one having ordinary skill in the art, at the time the invention was made to integrally form the flange portions, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art.

Art Unit: 3618

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrosino ('898).

The wheel assembly of Petrosino meets the limitations of claim 8 except that it employs an opening rather than a groove in order to secure the hinge pin. However, because these two elements were art-recognized equivalents at the time of the invention in wheel assemblies where the shape of the hinge receiving element is immaterial, one of ordinary skill would have found it obvious to substitute a groove for the opening of the wheel assembly of Petrosino.

Allowable Subject Matter

9. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hernandez shows a convertible shoe.

Chu shows a combined sports shoe and roller skate.

Peck et al. shows a mechanical brake for in-line roller skate.

Price shows a roller skate wheel with self-contained generator.

Texidor shows an athletic shoe exerciser.

Application/Control Number: 10/692,085

Page 7

Art Unit: 3618

Phares shows a roller skate.

Wetterstrand shows a roller skate.

Any inquiry concerning this communication should be directed to Bridget Avery at
telephone number ⁵⁷¹⁻²⁷²⁻⁶⁶⁹¹ ~~703-308-2086~~.

DF


Avery

April 18, 2005

 4-18-5
BRYAN FISCHMANN
PRIMARY EXAMINER